

STANDARD WATER NOTES

Standard water notes to be noted on title sheet of all street improvement plans or water system construction plans shall be as follows:

CARLSBAD MUNICIPAL WATER DISTRICT

1. WATER MAIN AND APPURTENANCES SHALL BE CONSTRUCTED INACCORDANCE WITH THE CARLSBAD MUNICIPAL WATER DISTRICT'S WATER SYSTEM DESIGN GUIDE, SPECIFICATIONS AND STANDARD DRAWINGS, MAY 2003 OR AS AMENDED.
2. THE CONTRACTOR SHALL OBTAIN AN EXCAVATION PERMIT FROM THE DIVISION OF INDUSTRIAL SAFETY AND PROVIDE PROOF OF OSHA NOTIFICATION BEFORE ANY EXCAVATION AND SHALL ADHERE TO ALL PROVISIONS OF THE STATE CONSTRUCTION SAFETY ORDERS.
3. BEFORE ANY CONNECTION OR SHUT DOWN OF VALVES ON EXISITING C.M.W.D. LINES, A PERMIT SHALL BE OBTAINED FROM THE C.M.W.D. OFFICE AND MUST BE SIGNED AND APPROVED BY THE CITY OF CARLSBAD'S DEPUTY CITY ENGINEER AND THE UTILITY OPERATIONS' PUBLIC WORKS MANAGER.
4. A PRECONSTRUCTION CONFERENCE MEETING SHALL BE HELD A MINIMUM OF SEVEN (7) DAYS BEFORE CONSTUCTION BEGINS. CONTACT THE CITY OF CARLSBAD ENGINEERING INSPECTION DEPARTMENT – TELEPHONE NO. (760) 438-3891. FOR SCHEDULING.
5. THE CONTRACTOR SHALL NOTIFY THE CITY OF CARLSBAD ENGINEERING INSPECTION DEPARTMENT 48 HOURS PRIOR TO STARTING WORK SO THAT INSPECTION MAY BE PROVIDED – TELEPHONE NO. (760) 438 –3891.
6. NO TREES OR STRUCTURES SHALL BE ALLOWED IN THE WATER LINE EASEMENT. ALL EXISTING TREES AND STRUCTURES SHALL BE REMOVED PRIOR TO COMMENCEMENT OF WORK – ANY EXCEPTIONS SHAL REQUIRE WRITTEN PERMISSION FROM THE CITY OF CARLSBAD DEPUTY ENGINEER.
7. ALL BURIED COPPER PIPING AND APPURTENANCES SHALL BE PROTECTED BY MEANS OF CATHODIC PROTECTION. IF DEVELOPER/OWNER CONDUCTS A SOILS TEST REPORT AND DEMONSTRATES THAT PROTECTION CAN BE PERFORMED IN ANOTHER MANNER, THE DEPUTY ENGINEER WILL CONSIDER AN ALTERNATE FORM OF PROTECTION.
8. THE EXACT HORIZONTAL AND VERTICAL ALIGNMENT AND TYPE OF MATERIALS OF THE FIRE LINE LOCATED BETWEEN THE DETECTOR CHECK VALVE AND BUILDING SHALL BE DETERMINED BY THE CITY OF CARLSBAD FIRE MARSHAL.

9. ALL RECLAIMED WATER MAINS AND APPURTENANCES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE "CARLSBAD RECLAMATION RULES AND REGULATION FOR THE CONSTRUCTION OF RECLAIMED WATER MAINS – CARLSBAD MUNICIPAL WATER DISTRICT." OCTOBER 1993 OR AS AMENDED.
10. ALL POTABLE WATER AND RECYCLED WATER SERVICES SHALL BE 1" AND ALL METERS SHALL BE 5/8" (UNLESS OTHERWISE NOTED ON PLANS).
11. ALL WATER METER BOXES SHALL BE 17" X 30" X 12" POLYMER CONCRETE AS MANUFACTURED BY ARMORCAST OR EQUAL.
12. MINIMUM SPACING BETWEEN POTABLE WATER LATERALS AND SEWER SERVICES SHALL BE 10 FEET.
13. THE TOP OF WATER METER BOXES SHALL BE FLUSH WITH THE FINISHED SURFACE GRADE.
14. CONSTRUCTION OF WATER MAINS AND RECYCLED WATER MAINS SHALL ADHERE TO THE "CRITERIA FOR THE SEPARATION OF WATER MAINS AND SANITARY SEWERS" PUBLISHED BY THE STATE OF CALIFORNIA'S DEPARTMENT OF HEALTH SERVICES.

END OF APPENDIX "B"

RECLAIMED WATER NOTES

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE CARLSBAD MUNICIPAL WATER DISTRICT'S "CARLSBAD RECLAMATION RULES AND REGULATIONS FOR CONSTRUCTION OF RECLAIMED WATER MAINS" DATED OCTOBER, 1993.
2. ALL PUBLIC FACILITIES SUCH AS COMFORT STATIONS, DRINKING FOUNTAINS, ETC., SHALL BE PROTECTED FROM SPRAY BY RECLAIMED WATER.
3. NO PONDING, RUN-OFF OR OVER-SPRAY IS PERMITTED.
4. HOSE BIBS ARE STRICTLY PROHIBITED.
5. ON-SITE CROSS-CONNECTIONS BETWEEN RECLAIMED WATER LINES AND POTABLE WATER LINES IS STRICTLY PROHIBITED.
6. NO SUBSTITUTION OF PIPE MATERIALS WILL BE ALLOWED WITHOUT PRIOR APPROVAL OF THE CITY OF CARLSBAD MUNICIPAL WATER DISTRICT.
7. ALL ON-SITE PIPES SHALL HAVE WARNING TAPE PER CARLSBAD MUNICIPAL WATER DISTRICT'S RULES AND REGULATIONS.
- *8. THE IRRIGATION SYSTEMS SHALL RUN BETWEEN THE HOURS OF 10:00 P.M. AND 6:00 A.M. THE FOLLOWING MORNING (SPOT IRRIGATION COULD BE DONE AT A DIFFERENT TIME) WITH QUALIFIED SUPERVISION PERSONNEL ON SITE.
9. PROVIDE A MINIMUM OF AT LEAST 18 INCHES OF COVER OVER ALL WIRING AND PIPING.
10. PRIVATE LOTS SHALL BE PROTECTED FROM CONTACT FROM RECLAIMED WATER, WHETHER BY WINDBLOWN SPRAY OR BY DIRECT APPLICATION, THROUGH IRRIGATION OR OTHER APPROVED USE. LACK OF PROTECTION, WHETHER BY DESIGN, CONSTRUCTION PRACTICE OR SYSTEM OPERATION, IS STRICTLY PROHIBITED.
11. CONTRACTOR SHALL ADJUST HEADS TO PREVENT OVER-SPRAYING ON ALL SIDEWALKS, STREET, AND PRIVATE LOTS.
12. QUICK COUPLING VALVES SHALL HAVE A SPECIAL COUPLE KEY PER CARLSBAD MUNICIPAL WATER DISTRICT'S RULES AND REGULATIONS.
13. METERS SHALL BE SIZED BY THE CITY OF CARLSBAD MUNICIPAL WATER DISTRICT.
14. ALL IRRIGATION PIPE SHALL BE STENCILED, COLOR-CODED (PURPLE) AND LAID WITH WARNING TAPE PER THE CITY OF CARLSBAD MUNICIPAL WATER DISTRICT'S RULES AND REGULATIONS.

15. ALL POTABLE WATER AND RECLAIMED WATER PIPING SHALL BE INSTALLED WITH THE STENCILING ORIENTED TOWARD THE TOP OF THE TRENCH.
16. WHEN A POTABLE WATER LINE AND RECLAIMED WATER LINE CROSS, THE RECLAIMED LINE SHALL BE INSTALLED WITHIN A PROTECTIVE SLEEVE. THE SLEEVE SHALL EXTEND 10 FEET FROM EACH SIDE, FROM THE CENTER LINE OF POTABLE LINE, FOR A TOTAL OF 20 FEET.
17. A 10 FOOT HORIZONTAL SEPARATION BETWEEN POTABLE WATER AND RECLAIMED WATER MAINS MUST BE MAINTAINED AT ALL TIMES. THE POTABLE LINE MUST BE INSTALLED ABOVE THE RECLAIMED LINE.
18. A MINIMUM OF 12 INCHES OF VERTICAL SEPARATION BETWEEN UTILITIES MUST BE MAINTAINED AT ALL TIMES.
- *19. DEVELOPER/CONTRACTOR SHALL CONDUCT A CROSS-CONNECTION TEST AND COVERAGE TEST AS DIRECTED BY THE CARLSBAD MUNICIPAL WATER DISTRICT ENGINEER OR THE SAN DIEGO COUNTY DEPARTMENT OF HEALTH SERVICES PRIOR TO ANY USE OF RECLAIMED WATER.
20. QUICK COUPLING VALVES USED IN RECLAIMED WATER SYSTEMS SHALL CONFORM TO THE FOLLOWING:
 - A. QUICK-COUPLING VALVES SHALL BE 1 INCH NOMINAL SIZE NELSON #7645, WITH BRASS CONSTRUCTION AND A NORMAL WORKING PRESSURE OF 150 P.S.I. OR RAINBIRD #44 NP.
 - B. IN ORDER TO PREVENT UNAUTHORIZED USE, THE VALVE SHALL BE OPERATED ONLY WITH A SPECIAL COUPLER KEY WITH AN ACME THREAD FOR OPENING AND CLOSING THE VALVE.
 - C. THE COVER SHALL BE PERMANENTLY ATTACHED TO THE QUICK-COUPLING VALVES. IT SHALL BE PURPLE RUBBER OR VINYL.
 - D. LOCKING COVERS ARE REQUIRED.
21. AN ANNUAL CROSS CONNECTION INSPECTION WILL BE DONE BY EITHER CARLSBAD MUNICIPAL WATER DISTRICT OR SAN DIEGO COUNTY DEPARTMENT OF HEALTH SERVICES. COPIES OF INSPECTION REPORTS WILL BE FORWARDED TO THE NON-INSPECTING PARTY.
- *22. DEVELOPER SHALL SHOW THE LOCATION OF R.C. SIGNS "DO NOT DRINK" ON THESE PLANS.
- *23. AN ON-SITE USER/SUPERVISOR SHALL BE DESIGNATED IN WRITING. THIS INDIVIDUAL SHALL BE FAMILIAR WITH PLUMBING SYSTEMS WITHIN THE PROPERTY, WITH THE BASIC CONCEPTS OF BACKFLOW/CROSS-CONNECTION PROTECTION, AND THE SPECIFIC REQUIREMENTS OF A RECLAIMED WATER SYSTEM. COPIES OF THE DESIGNATION, WITH CONTACT PHONE NUMBERS SHALL BE PROVIDED TO THE SAN DIEGO COUNTY DEPARTMENT OF HEALTH SERVICES AND CARLSBAD MUNICIPAL WATER DISTRICT.

IN CASE OF EMERGENCY CONTACT _____ AT _____

OR AFTER HOURS CONTACT _____ AT _____

24. SHOW ALL PUBLIC & PRIVATE POTABLE WATER MAINS ON IMPROVEMENT PLANS.

*ITEM NOS. 8, 19, & 23 SHALL BE REQUIRED JUST PRIOR TO THE ACTUAL USE OF RECLAIMED WATER. ITEM NO. 22 THE SIGNAGE PLAN SHALL BE PART OF THIS I.P. BUT THE ACTUAL SIGNS & TAGS WILL BE INSTALLED JUST PRIOR TO ACTUAL USE OF R.C. WATER.

SIGNAGE NOTES

THE FOLLOWING GUIDELINES FOR THE USE OF RECLAIMED WATER ARE TO BE PERMANENTLY POSTED INSIDE THE DOOR OF EACH CONTROLLER WHERE THEY ARE EASILY VISIBLE. PLACE ON 8-1/2" X 11" SIZED SIGN.

COLOR: PURPLE BACKGROUND WITH BLACK LETTERING.

1. GUIDELINES FOR RECLAIMED WATER USE

- A. IRRIGATE BETWEEN THE HOURS OF 10:00 P.M. AND 6:00 A.M. ONLY. WATERING OUTSIDE THIS TIME FRAME MUST BE DONE MANUALLY WITH QUALIFIED SUPERVISORY PERSONNEL ON-SITE. NO SYSTEM SHALL AT ANY TIME BE LEFT UNATTENDED DURING USE OUTSIDE THE NORMAL SCHEDULE.
- B. IRRIGATE IN A MANNER THAT WILL MINIMIZE RUN-OFF, POOLING, AND PONDING. THE APPLICATION RATE SHALL NOT EXCEED THE INFILTRATION RATE OF THE SOIL. TIMERS MUST BE ADJUSTED SO AS TO BE COMPATIBLE WITH THE LOWEST SOIL INFILTRATION RATE PRESENT. THIS PROCEDURE MAY BE FACILITATED BY THE EFFICIENT SCHEDULING OF THE AUTOMATIC CONTROL CLOCKS (I.E., EMPLOYING THE REPEAT FUNCTION TO BREAK UP THE TOTAL IRRIGATION TIME INTO CYCLES THAT WILL PROMOTE MAXIMUM SOIL ABSORPTION).
- C. ADJUST SPRAY HEADS TO ELIMINATE OVERSPRAY ONTO AREAS NOT UNDER THE CONTROL OF THE CUSTOMER. FOR EXAMPLE, POOL DECKS, PRIVATE PATIOS AND LOTS, AND STREETS AND SIDEWALKS.
- D. MONITOR AND MAINTAIN THE SYSTEM TO MINIMIZE EQUIPMENT AND MATERIAL FAILURE. BROKEN SPRINKLER HEADS, LEAKS, UNRELIABLE VALVES, ETC., SHOULD BE REPAIRED AS SOON AS THEY BECOME APPARENT.

- E. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR EDUCATING EACH EMPLOYEE AND ALL MAINTENANCE PERSONNEL ON A CONTINUOUS BASIS, REGARDING THE PRESENCE OF RECLAIMED WATER. MAINTENANCE PERSONNEL MUST BE INFORMED THAT WATER IS FOR IRRIGATION PURPOSES ONLY AND IS NOT APPROVED FOR DRINKING OR FOR HAND AND TOOL WASHING, ETC.
- F. OBTAIN PRIOR APPROVAL OF ALL PROPOSED CHANGES AND MODIFICATIONS TO ANY PRIVATE ON-SITE FACILITIES. SUCH CHANGES MUST BE SUBMITTED TO, AND APPROVED BY, THE DISTRICT ENGINEERING OFFICE AND DESIGNED IN ACCORDANCE WITH DISTRICT STANDARDS.
 - 1. ALL RECLAIMED WATER SPRINKLER CONTROL VALVES SHALL BE TAGGED WITH IDENTIFICATION TAGS.
 - A. TAGS SHALL BE WEATHERPROOF PLASTIC, 3" X 4", PURPLE IN COLOR, WITH THE WORDS "WARNING RECLAIMED WATER – DO NOT DRINK" IMPRINTED ON ONE SIDE, AND "AVISO – AGUA IMPURA – NO TOMAR" IMPRINTED ON THE OTHER SIDE. IMPRINTING SHALL BE PERMANENT AND BLACK IN COLOR. USE TAGS AS MANUFACTURED BY T. CHRISTY ENTERPRISES OR APPROVED EQUAL.
 - B. ONE TAG SHALL BE ATTACHED TO EACH VALVE AS FOLLOWS:
 - 1. ATTACH TO VALVE STEM DIRECTLY OR WITH PLASTIC TIE-WRAP OR
 - 2. ATTACH TO SOLENOID WIRE DIRECTLY OR WITH PLASTIC TIE-WRAP OR
 - 3. ATTACH TO VALVE COVER WITH EXISTING VALVE COVER BOLT.
 - 2. ALL SPRINKLER HEADS SHALL BE IDENTIFIED AS RECLAIMED WATER SPRINKLER HEADS.
- G. EACH AUTOMATIC CONTROLLER AND ITS ASSOCIATED EQUIPMENT SHALL BE IDENTIFIED WITH A SIGN BEARING THE WORDS "RECLAIMED WATER USED FOR IRRIGATION" IN ENGLISH AND SPANISH, WITH BLACK LETTERS 1" HIGH ON A PURPLE BACKGROUND. THE SIGN SHALL BE PLACED SO THAT IT CAN BE READILY SEEN BY ANY OPERATIONS PERSONNEL UTILIZING THE EQUIPMENT.

GRADING NOTES

(IN ADDITION TO THE REQUIREMENTS OF CHAPTER 11.06 OF THE CARLSBAD MUNICIPAL CODE)

1. THIS PLAN SUPERSEDES ALL OTHER PLANS PREVIOUSLY APPROVED BY THE CITY OF CARLSBAD REGARDING GRADING SHOWN ON THIS SET OF PLANS.
2. APPROVAL OF THIS PLAN DOES NOT LESSEN OR WAIVE ANY PORTION OF THE CARLSBAD MUNICIPAL CODE, RESOLUTION OF CONDITIONAL APPROVAL, CITY STANDARDS OR OTHER ADDITIONAL DOCUMENTS LISTED HEREON AS THEY MAY PERTAIN TO THIS PROJECT. THE ENGINEER IN RESPONSIBLE CHARGE SHALL REVISE THESE PLANS WHEN NON-CONFORMANCE IS DISCOVERED.
3. CITY APPROVAL OF PLANS DOES NOT RELIEVE THE DEVELOPER OR ENGINEER-OF-WORK FROM RESPONSIBILITY FOR THE CORRECTION OF ERRORS AND OMISSIONS DISCOVERED DURING CONSTRUCTION. ALL PLAN REVISIONS SHALL BE PROMPTLY SUBMITTED TO THE CITY ENGINEER FOR APPROVAL.
4. A RIGHT-OF-WAY PERMIT FROM THE CITY ENGINEER WILL BE REQUIRED FOR ANY WORK IN THE PUBLIC RIGHT OF WAY. PRIOR TO PERMIT ISSUANCE, A CERTIFICATE OF INSURANCE MUST BE FILED NAMING THE CITY OF CARLSBAD AS AN ADDITIONAL INSURED ON THE PERMITTEE'S POLICY IN THE MINIMUM AMOUNT OF \$1,000,000.00 FOR EACH OCCURRENCE OF LIABILITY. THE INSURANCE COMPANY WRITING THE POLICY MUST HAVE A RATING OF "A" AND A SIZE CATEGORY OF CLASS V AS ESTABLISHED BY "BESTS" KEY RATING GUIDE.
5. UNLESS EXEMPTED BY SECTION 301.(b)5 OF THE UNIFORM BUILDING CODE, RETAINING WALLS OUTSIDE OF PUBLIC RIGHT OF WAY REQUIRE SEPARATE PERMITS FROM THE BUILDING DEPARTMENT.
6. NO WORK SHALL BE COMMENCED UNTIL ALL PERMITS HAVE BEEN OBTAINED FROM THE CITY AND OTHER APPROPRIATE AGENCIES.
7. APPROVAL OF THESE PLANS BY THE CITY ENGINEER DOES NOT AUTHORIZE ANY WORK OR GRADING TO BE PERFORMED UNTIL THE PROPERTY OWNER'S PERMISSION HAS BEEN OBTAINED AND A VALID GRADING PERMIT HAS BEEN ISSUED.
8. NO REVISIONS WILL BE MADE TO THESE PLANS WITHOUT THE WRITTEN APPROVAL OF THE CITY ENGINEER, NOTED WITHIN THE REVISION BLOCK, ON THE APPROPRIATE SHEET OF THE PLANS AND THE TITLE SHEET.
9. ORIGINAL DRAWINGS SHALL BECOME THE PROPERTY OF THE CITY UPON BEING SIGNED BY THE CITY ENGINEER.

10. THE ORIGINAL DRAWING SHALL BE REVISED TO REFLECT AS-BUILT CONDITIONS BY THE ENGINEER-OF-WORK PRIOR TO FINAL ACCEPTANCE OF THE WORK BY THE CITY.
11. ACCESS FOR FIRE AND OTHER EMERGENCY VEHICLES SHALL BE MAINTAINED TO THE PROJECT SITE AT ALL TIMES DURING CONSTRUCTION.
12. WHERE TRENCHES ARE WITHIN CITY EASEMENTS, A SOILS REPORT COMPRISED OF: (A) SUMMARY SHEET, (B) LABORATORY WORK SHEETS AND (C) COMPACTION CURVES, SHALL BE SUBMITTED BY A PROFESSIONAL ENGINEER OF THE STATE OF CALIFORNIA, PRINCIPALLY DOING BUSINESS IN THE FIELD OF APPLIED SOILS MECHANICS. THE SOILS REPORT WILL BE SUBMITTED TO THE CITY ENGINEERING INSPECTOR WITHIN TWO WORKING DAYS OF THE COMPLETION OF FIELD TESTS.
13. A SOILS COMPACTION REPORT AND COMPLIANCE VERIFICATION REGARDING ADHERENCE TO RECOMMENDATIONS OUTLINED IN THE SOILS REPORT IS REQUIRED PRIOR TO THE ISSUANCE OF A BUILDING PERMIT. ALL CONTROLLED GRADING SHALL BE DONE UNDER THE DIRECTION OF A PROFESSIONAL ENGINEER OF THE STATE OF CALIFORNIA PRINCIPALLY DOING BUSINESS IN THE FIELD OF APPLIED SOILS MECHANICS. ALL FILL OR FUTURE FILL AREAS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF CARLSBAD STANDARD SPECIFICATIONS AND THE "EARTHWORK SPECIFICATIONS" ATTACHED TO THE PRELIMINARY SOILS INVESTIGATION. DAILY FIELD COMPACTION REPORTS WILL BE SUBMITTED TO THE PROJECT INSPECTOR.
14. A PRECONSTRUCTION MEETING SHALL BE HELD AT THE SITE PRIOR TO THE BEGINNING OF WORK AND SHALL BE ATTENDED BY ALL REPRESENTATIVES RESPONSIBLE FOR CONSTRUCTION, INSPECTION, SUPERVISION, TESTING AND ALL OTHER ASPECTS OF THE WORK. THE CONTRACTOR SHALL REQUEST A PRECONSTRUCTION MEETING BY CALLING THE INSPECTION LINE AT (760) 438-3891 AT LEAST FIVE (5) WORKING DAYS PRIOR TO STARTING CONSTRUCTION. THE CONTRACTOR WILL THEN BE CONTACTED BY THE PROJECT INSPECTOR TO COORDINATE A DATE AND TIME FOR THE PRECONSTRUCTION MEETING. APPROVED DRAWINGS MUST BE AVAILABLE PRIOR TO SCHEDULING. THE GRADING PERMIT WILL BE PROVIDED BY THE PROJECT INSPECTOR AT THE MEETING.
15. ALL INSPECTION REQUESTS OTHER THAN FOR THE PRECONSTRUCTION MEETING WILL BE MADE BY CALLING THE ENGINEERING 24-HOUR INSPECTION REQUEST LINE AT (760) 438-3891. INSPECTION REQUEST MUST BE RECEIVED PRIOR TO 2:00 P.M., ON THE DAY BEFORE THE INSPECTION IS NEEDED. INSPECTIONS WILL BE MADE THE NEXT WORK DAY UNLESS YOU REQUEST OTHERWISE. REQUESTS MADE AFTER 2:00 P.M. WILL BE SCHEDULED FOR TWO FULL WORK DAYS LATER.
16. THE OWNER AND/OR APPLICANT THROUGH THE DEVELOPER AND/OR CONTRACTOR SHALL DESIGN, CONSTRUCT AND MAINTAIN ALL SAFETY DEVICES, INCLUDING SHORING, AND SHALL BE SOLELY RESPONSIBLE FOR CONFORMING TO ALL LOCAL, STATE AND FEDERAL SAFETY AND HEALTH STANDARDS, LAWS AND REGULATIONS.

17. THE CONTRACTOR SHALL CONFORM TO LABOR CODE SECTION 6705 BY SUBMITTING A DETAIL PLAN TO THE CITY ENGINEER AND/OR CONCERNED AGENCY SHOWING THE DESIGN OF SHORING, BRACING SLOPING OR OTHER PROVISIONS TO BE MADE OF WORKER PROTECTION FROM THE HAZARD OF CAVING GROUND DURING THE EXCAVATION OF SUCH TRENCH OR TRENCHES OR DURING THE PIPE INSTALLATION THEREIN. THIS PLAN MUST BE PREPARED FOR ALL TRENCHES FIVE FEET (5') OR MORE IN DEPTH AND APPROVED BY THE CITY ENGINEER AND/OR CONCERNED AGENCY PRIOR TO EXCAVATION. IF THE PLAN VARIES FROM THE SHORING SYSTEM STANDARDS ESTABLISHED BY THE CONSTRUCTION SAFETY ORDERS, TITLE 8 CALIFORNIA ADMINISTRATIVE CODE, THE PLAN SHALL BE PREPARED BY A REGISTERED ENGINEER AT THE CONTRACTOR'S EXPENSE. A COPY OF THE OSHA EXCAVATION PERMIT MUST BE SUBMITTED TO THE INSPECTOR PRIOR TO EXCAVATION.
18. NO BLASTING SHALL BE PERFORMED UNTIL A VALID BLASTING PERMIT HAS BEEN OBTAINED FROM THE CITY OF CARLSBAD. SUBMIT APPLICATION FOR BLASTING PERMIT WELL IN ADVANCE OF THE SCHEDULING OF BLASTING OPERATIONS.
19. IF ANY ARCHAEOLOGICAL RESOURCES ARE DISCOVERED WITHIN ANY WORK AREA DURING CONSTRUCTION, OPERATIONS WILL CEASE IMMEDIATELY, AND THE PERMITTEE WILL NOTIFY THE CITY ENGINEER. OPERATIONS WILL NOT RESTART UNTIL THE PERMITTEE HAS RECEIVED WRITTEN AUTHORITY FROM THE CITY ENGINEER TO DO SO.
20. ALL OPERATIONS CONDUCTED ON THE SITE OR ADJACENT THERETO, INCLUDING WARMING UP, REPAIR, ARRIVAL, DEPARTURE OR OPERATION OF TRUCKS, EARTHMOVING EQUIPMENT, CONSTRUCTION EQUIPMENT AND ANY OTHER ASSOCIATED GRADING EQUIPMENT SHALL BE LIMITED TO THE PERIOD BETWEEN 7:00 A.M. AND SUNSET EACH DAY, MONDAY THROUGH FRIDAY AND NO EARTHMOVING OR GRADING OPERATIONS SHALL BE CONDUCTED ON WEEKENDS OR HOLIDAYS (A LIST OF CITY HOLIDAYS IS AVAILABLE AT THE ENGINEERING DEPARTMENT COUNTER).
21. ALL OFF-SITE HAUL ROUTES SHALL BE SUBMITTED BY THE CONTRACTOR TO THE CITY ENGINEER FOR APPROVAL TWO FULL WORKING DAYS PRIOR TO BEGINNING OF WORK.
22. IMPORT MATERIAL SHALL BE OBTAINED FROM, AND WASTE MATERIAL SHALL BE DEPOSITED AT, A SITE APPROVED BY THE CITY ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DEBRIS OR DAMAGE OCCURRING ALONG THE HAUL ROUTES OR ADJACENT STREETS AS A RESULT OF THE GRADING OPERATION.
23. BRUSH SHALL BE REMOVED ONLY WITHIN THE AREA TO BE GRADED. NO TREES ARE TO BE REMOVED UNLESS SPECIFICALLY NOTED ON THE PLAN.
24. ALL AREAS SHALL BE GRADED TO DRAIN. GRADING RESULTING IN THE PONDING OF WATER IS NOT PERMITTED. ALL EARTHEN SWALES AND DITCHES SHALL HAVE A MINIMUM ONE PERCENT SLOPE.

25. THESE PLANS ARE SUBJECT TO A SIGNED AND APPROVED SET OF EROSION CONTROL PLANS. EROSION CONTROL SHALL BE AS SHOWN AND AS APPROVED BY THE CITY ENGINEER OR AS DIRECTED BY THE PROJECT INSPECTOR.
26. ALL SLOPES SHALL BE TRIMMED TO A FINISH GRADE TO PRODUCE A UNIFORM SURFACE AND CROSS SECTION. THE SITE SHALL BE LEFT IN A NEAT AND ORDERLY CONDITION. ALL STONES, ROOTS OR OTHER DEBRIS SHALL BE REMOVED AND DISPOSED OF AT A SITE APPROVED OF BY THE CITY ENGINEER.
27. ALL SLOPES SHALL BE IRRIGATED, STABILIZED, PLANTED AND/OR HYDROSEEDDED WITHIN TEN (10) DAYS OF THE TIME WHEN EACH SLOPE IS BROUGHT TO GRADE AS SHOWN ON THE APPROVED GRADING PLANS.
28. LANDSCAPING SHALL BE ACCOMPLISHED ON ALL SLOPES AND PADS AS REQUIRED BY THE CITY OF CARLSBAD LANDSCAPE MANUAL, THE LANDSCAPING PLANS FOR THIS PROJECT, DRAWING NO. _____, AND/OR AS DIRECTED BY THE CITY ENGINEER OR PLANNING DIRECTOR.
29. THE OWNER/APPLICANT SHALL ENSURE THAT ALL CONTRACTORS SHALL COORDINATE THE WORK OF THESE GRADING PLANS WITH THAT SHOWN ON BOTH THE LANDSCAPE AND IRRIGATION PLANS AND THE IMPROVEMENT PLANS AS REQUIRED FOR THIS WORK IN ACCORDANCE WITH THE LANDSCAPE MANUAL TIME REQUIREMENTS.
30. STORM DRAIN PIPE SHALL BE REINFORCED CONCRETE PIPE WITH A MINIMUM D-LOAD OF 1,350. FOR PRIVATE STORM DRAIN PIPES, UP TO 15" PVC MAY BE UTILIZED PROVIDED DEPTH IS LESS THAN 15 FEET AND BACKFILLED WITH 3/4" ROCK PER SDRSD S-4 TYPE 'C' AND PIPE MEETS ASTM STANDARD 3034 FOR SDR 35 SOLID WALL PIPE.
31. WHERE AN EXISTING PIPE LINE IS TO BE ABANDONED AS A RESULT OF THE GRADING OPERATION, IT SHALL BE REMOVED WITHIN TWENTY FEET OF BUILDING OR STREET AREAS AND REPLACED WITH PROPERLY COMPACTED SOILS. IN OTHER AREAS THE PIPE WILL BE PLUGGED WITH CONCRETE OR REMOVED AS APPROVED BY THE CITY ENGINEER.
32. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING FACILITIES (ABOVE GROUND AND UNDER GROUND) WITHIN THE PROJECT SITE SUFFICIENTLY AHEAD OF GRADING TO PERMIT THE REVISION OF THE GRADING PLANS IF IT IS FOUND THAT THE ACTUAL LOCATIONS ARE IN CONFLICT WITH THE PROPOSED WORK.

33. THE CONTRACTOR SHALL NOTIFY AFFECTED UTILITY COMPANIES (SEE BELOW) AT LEAST TWO (2) FULL WORKING DAYS PRIOR TO STARTING GRADING NEAR THEIR FACILITIES AND SHALL COORDINATE THE WORK WITH A COMPANY REPRESENTATIVE.

UNDERGROUND SERVICE ALERT	(800) 422-4133
SDG&E	(800) 660-7343
PACIFIC BELL	(800) 892-0123
ADELPHIA CABLE COMMUNICATIONS	(760) 438-7741
COX COMMUNICATIONS	(760) 806-9809
CITY OF CARLSBAD (STREETS & STORM DRAIN)	(760) 434-2980
*CITY OF CARLSBAD (SEWER, WATER & RECLAIMED WATER)	(760) 438-2722
*SAN DIEGUITO WATER DISTRICT	(760) 633-2650
*LEUCADIA COUNTY WATER DISTRICT	(760) 753-0155
*VALLECITOS WATER DISTRICT	(760) 744-0460
*OLIVENHAIN WATER DISTRICT	(760) 753-6466
*BUENA SANITATION DISTRICT	(760) 726-1340

*AS APPROPRIATE

34. PERMIT COMPLIANCE REQUIREMENTS:

- A. FOR CONTROLLED GRADING – THE APPLICANT HIRES A CIVIL ENGINEER, SOILS ENGINEER, AND/OR GEOLOGIST TO GIVE TECHNICAL ADVICE, OBSERVE AND CONTROL THE WORK IN PROGRESS {11.06.170(B)} CARLSBAD MUNICIPAL CODE.
- B. PRIOR TO FINAL APPROVAL OF A GRADING PERMIT – THE FOLLOWING REPORTS MUST BE SUBMITTED TO THE CITY ENGINEER VIA THE PROJECT INSPECTOR {11.06.190(B)} CARLSBAD MUNICIPAL CODE:
- (1) FINAL REPORT BY SUPERVISING GRADING ENGINEER STATING ALL GRADING IS COMPLETE. ALL EROSION CONTROL, SLOPE PLANTING AND IRRIGATION ARE INSTALLED IN CONFORMANCE WITH CITY CODE AND THE APPROVED PLANS (OBTAIN SAMPLE OF COMPLIANCE LETTER FROM CITY ENGINEERING DEPARTMENT).
 - (2) AS-BUILT GRADING PLAN.
 - (3) REPORT FROM THE SOILS ENGINEER, WHICH INCLUDES RECOMMENDED SOIL BEARING CAPACITIES, A STATEMENT AS TO THE EXPANSIVE QUALITY OF THE SOIL, AND SUMMARIES OF FIELD AND LABORATORY TESTS. THE REPORT SHALL ALSO INCLUDE A STATEMENT BY THE SOILS ENGINEER THAT THE GRADING WAS DONE IN ACCORDANCE WITH THE REQUIREMENTS AND RECOMMENDATIONS OUTLINED IN THE PRELIMINARY SOILS REPORT AND ANY SUPPLEMENTS THERETO.
 - (4) REPORT WITH AS-BUILT GEOLOGIC PLAN, IF REQUIRED BY THE CITY.

35. UNLESS A GRADING PERMIT FOR THIS PROJECT IS ISSUED WITHIN ONE (1) YEAR AFTER THE CITY ENGINEER'S APPROVAL, THESE PLANS MAY BE REQUIRED TO BE RESUBMITTED FOR PLANCHECK. PLANCHECK FEES WILL BE REQUIRED FOR ANY SUCH RECHECK.
36. THE SOILS REPORT TITLED _____,
PREPARED BY _____, DATED _____,
20____, SHALL BE CONSIDERED AS A PART OF THIS GRADING PLAN.
ALL GRADING SHALL BE DONE IN ACCORDANCE WITH THE
RECOMMENDATIONS AND SPECIFICATIONS CONTAINED IN SAID SOILS
REPORT.

EROSION CONTROL NOTES

1. IN CASE EMERGENCY WORK IS REQUIRED, CONTACT _____ AT _____ (PHONE NUMBER).
2. EQUIPMENT AND WORKERS FOR EMERGENCY WORK SHALL BE MADE AVAILABLE AT ALL TIMES DURING THE RAINY SEASON. ALL NECESSARY MATERIALS SHALL BE STOCKPILED ON SITE AT CONVENIENT LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF TEMPORARY DEVICES WHEN RAIN IS EMINENT.
3. DEVICES SHOWN ON PLANS SHALL NOT BE MOVED OR MODIFIED WITHOUT THE APPROVAL OF THE ENGINEERING INSPECTOR.
4. THE CONTRACTOR SHALL RESTORE ALL EROSION CONTROL DEVICES TO WORKING ORDER TO THE SATISFACTION OF THE CITY ENGINEER AFTER EACH RUN-OFF PRODUCING RAINFALL.
5. THE CONTRACTOR SHALL INSTALL ADDITIONAL EROSION CONTROL MEASURES AS MAY BE REQUIRED BY THE CITY ENGINEER DUE TO UNCOMPLETED GRADING OPERATIONS OR UNFORESEEN CIRCUMSTANCES WHICH MAY ARISE.
6. THE CONTRACTOR SHALL BE RESPONSIBLE AND SHALL TAKE NECESSARY PRECAUTIONS TO PREVENT PUBLIC TRESPASS ONTO AREAS WHERE IMPOUNDED WATERS CREATE A HAZARDOUS CONDITION.
7. ALL EROSION CONTROL MEASURES PROVIDED PER THE APPROVED GRADING PLAN SHALL BE INCORPORATED HEREON.
8. GRADED AREAS AROUND THE PROJECT PERIMETER MUST DRAIN AWAY FROM THE FACE OF SLOPE AT THE CONCLUSION OF EACH WORKING DAY.
9. ALL REMOVABLE PROTECTIVE DEVICES SHOWN SHALL BE IN PLACE AT THE END OF EACH WORKING DAY WHEN THE FIVE (5) DAY RAIN PROBABILITY FORECAST EXCEEDS FORTY PERCENT (40%). SILT AND OTHER DEBRIS SHALL BE REMOVED AFTER EACH RAINFALL.
10. ALL GRAVEL BAGS SHALL BE BURLAP TYPE WITH 3/4 INCH MINIMUM AGGREGATE.
11. SHOULD GERMINATION OF HYDROSEEDED SLOPES FAIL TO PROVIDE EFFECTIVE COVERAGE OF GRADED SLOPES (90% COVERAGE) PRIOR TO NOVEMBER 15, THE SLOPES SHALL BE STABILIZED BY PUNCH STRAW INSTALLED IN ACCORDANCE WITH SECTION 35.023 OF THE EROSION AND SEDIMENT CONTROL HANDBOOK OF THE DEPARTMENT OF CONSERVATION, STATE OF CALIFORNIA.

TEMPORARY EROSION CONTROL
PLANTING AND IRRIGATION

ALL PERMANENT AND TEMPORARY EROSION CONTROL PLANTING AND IRRIGATION SHALL BE INSTALLED AND MAINTAINED AS REQUIRED IN SECTION 212 OF THE STANDARD SPECIFICATIONS AND THE FOLLOWING:

- A. HYDROSEEDING SHALL BE APPLIED TO:
 - 1. ALL SLOPES THAT ARE GRADED 6:1 (HORIZONTAL TO VERTICAL) OR STEEPER WHEN THEY ARE:
 - A. THREE FEET OR MORE IN HEIGHT AND ADJACENT TO A PUBLIC WALL OR STREET.
 - B. ALL SLOPES FOUR FEET OR MORE IN HEIGHT.
 - 2. AREAS GRADED FLATTER THAN 6:1 WHEN ANY OF THE FOLLOWING CONDITIONS EXIST:
 - A. NOT SCHEDULED FOR IMPROVEMENTS (CONSTRUCTION OR GENERAL LANDSCAPING) WITHIN 60 DAYS OF ROUGH GRADING.
 - B. IDENTIFIED BY THE PARKS AND RECREATION DIRECTOR AS HIGHLY VISIBLE TO THE PUBLIC.
 - C. HAVE ANY SPECIAL CONDITION IDENTIFIED BY THE CITY ENGINEER THAT WARRANTS IMMEDIATE TREATMENT.
- B. HYDROSEEDING AREAS SHALL BE IRRIGATED IN ACCORDANCE WITH THE FOLLOWING CRITERIA:
 - 1. ALL SLOPES THAT ARE GRADED 6:1 OR STEEPER AND THAT ARE:
 - A. THREE TO EIGHT FEET IN HEIGHT SHALL BE IRRIGATED BY HAND WATERING FROM QUICK COUPLERS/HOSE BIBS OR A CONVENTIONAL SYSTEM OF LOW PRECIPITATION SPRINKLER HEADS PROVIDING 100% COVERAGE.
 - B. GREATER THAN 8 FEET IN HEIGHT SHALL BE WATERED BY A CONVENTIONAL SYSTEM OF LOW PRECIPITATION SPRINKLER HEADS PROVIDING 100% COVERAGE.
 - 2. AREAS SLOPED LESS THAN 6:1 SHALL BE IRRIGATED AS APPROVED BY THE CITY ENGINEER, PRIOR TO HYDROSEEDING. THE DEVELOPER SHALL SUBMIT A PROPOSED SCHEME TO PROVIDE IRRIGATION TO THE CITY ENGINEER. THE PROPOSAL SHALL BE SPECIFIC REGARDING THE NUMBERS, TYPES AND COSTS OF THE ELEMENTS OF THE PROPOSED SYSTEM.
 - 3. IRRIGATION SHALL MAINTAIN THE MOISTURE LEVEL OF THE SOIL AT THE OPTIMUM LEVEL FOR THE GROWTH OF THE HYDROSEEDING GROWTH.

C. HYDROSEEDING MIX SHALL CONSIST OF ALL OF THE FOLLOWING:

1. SEED MIX SHALL CONSIST OF NO LESS THAN:
 - A. 20 LBS. PER ACRE OF ROSE CLOVER
 - B. 20 LBS. PER ACRE OF ZORRO FESCUE
 - C. 3 LBS. PER ACRE OF E SCHOOL CIA CALIFORNICA
 - D. 4 LBS. PER ACRE OF ACHILLEA MILLEFOLIA
 - E. 3 LBS. PER ACRE OF ALYSSUM (CARPET OF SNOW)
 - F. 1/2 LB. PER ACRE OF DIMORPHOLECA
 - G. ITEMS C, D, E, AND F OF THIS SUBSECTION MAY BE OMITTED ON LOCATIONS WHERE THE AREA BEING HYDROSEEDING IS NOT VISIBLE FROM EITHER A PUBLIC STREET OR RESIDENTIAL STRUCTURES.
 - H. ITEM A OF THIS SUBSECTION MUST BE INOCULATED WITH A NITROGEN FIXING BACTERIA AND APPLIED DRY EITHER BY DRILLING OR BROADCASTING BEFORE HYDROSEEDING.
 - I. ALL SEED MATERIALS SHALL BE TRANSPORTED TO THE JOBSITE IN UNOPENED CONTAINERS WITH THE CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE CERTIFICATION TAG ATTACHED TO, OR PRINTED ON SAID CONTAINERS.
 - J. NON-PHYTO-TOXIC WETTING AGENTS MAY BE ADDED TO THE HYDROSEED SLURRY AT THE DISCRETION OF THE CONTRACTOR.
2. TYPE 1 MULCH APPLIED AT THE RATE OF NO LESS THAN 2,000 LBS. PER ACRE. TYPE 6 MULCH (STRAW) MAY BE SUBSTITUTED, ALL OR PART, FOR HYDRAULICALLY APPLIED FIBER MATERIAL. WHEN STRAW IS USED IT MUST BE ANCHORED TO THE SLOPE BY MECHANICALLY PUNCHING NO LESS THAN 50% OF THE STRAW INTO THE SOIL.
3. FERTILIZER CONSISTING OF AMMONIUM PHOSPHATE SULFATE, 16-20-0, WITH 15% SULPHUR APPLIED AT THE RATE OF 500 LBS. PER ACRE.

- D. AREAS TO BE HYDROSEEDING SHALL BE PREPARED PRIOR TO HYDROSEEDING BY:
 - 1. ROUGHENING THE SURFACE TO BE PLANTED BY ANY OR A COMBINATION OF:
 - A. TRACK WALKING SLOPES STEEPER THAN 6:1.
 - B. HARROWING AREAS 6:1 OR FLATTER THAT ARE SUFFICIENTLY FRIABLE.
 - C. RIPPING AREAS THAT WILL NOT BREAK UP USING ITEMS A OR B, ABOVE.
 - 2. CONDITIONING THE SOILS SO THAT IT IS SUITABLE FOR PLANTING BY:
 - A. ADJUSTING THE SURFACE SOIL MOISTURE TO PROVIDE A DAMP BUT NOT SATURATED SEED BED.
 - B. THE ADDITION OF SOIL AMENDMENTS, PH ADJUSTMENT, LEACHING OR COVERING SALINE SOILS TO PROVIDE VIABLE CONDITIONS FOR GROWTH.
- E. HYDROSEEDING AREAS SHALL BE MAINTAINED TO PROVIDE A VIGOROUS GROWTH UNTIL THE PROJECT IS PERMANENTLY LANDSCAPED OR, FOR AREAS WHERE HYDROSEEDING IS THE PERMANENT LANDSCAPING, UNTIL THE PROJECT IS COMPLETED AND ALL BONDS RELEASED.

STREET NOTES

1. ACTUAL STRUCTURAL SECTIONS WILL BE DETERMINED AFTER "R" VALUE TESTS HAVE BEEN CONDUCTED BY A PROFESSIONAL ENGINEER OF THE STATE OF CALIFORNIA, PRINCIPALLY DOING BUSINESS IN THE FIELD OF APPLIED SOIL MECHANICS, ON THE PREPARED BASEMENT SOIL. THE "R" VALUE TESTS AND THE ENGINEERED STRUCTURAL SECTION MUST BE SUBMITTED TO THE ENGINEERING INSPECTOR FOR REVIEW AND APPROVAL A MINIMUM OF TWO (2) CITY WORKING DAYS BEFORE THE WORK BEGINS.
2. STREET LIGHTS SHALL BE INSTALLED AS SHOWN ON THESE PLANS, UNDERGROUND CONDUIT RUNS, SERVICE POINTS AND HAND-HOLES SHALL BE SHOWN ON THE "AS-BUILT" PLANS. NO DIRECT BURIAL STREET LIGHT FOUNDATIONS WILL BE ALLOWED. ALL LUMINAIRES SHALL BE "CUT OFF" TYPE.
3. ALL UNDERGROUND UTILITIES AND LATERALS SHALL BE INSTALLED PRIOR TO CONSTRUCTION OF CURBS, CROSS GUTTERS OR SURFACING OF STREETS.
4. STORM DRAIN PIPE SHALL BE REINFORCED CONCRETE PIPE WITH A MINIMUM D-LOAD OF 1,350. FOR PRIVATE STORM DRAIN PIPES, UP TO 15" PVC MAY BE UTILIZED PROVIDED DEPTH IS LESS THAN 15 FEET AND BACKFILLED WITH 3/4" ROCK PER SDRSD S-4 TYPE "C" AND PIPE MEETS ASTM STANDARD 3034 FOR SDR 35 SOLID WALL PIPE.
5. WHERE AN EXISTING PIPE LINE IS TO BE ABANDONED IT SHALL BE REMOVED WITHIN TWENTY FEET OF BUILDING OR STREET AREAS AND REPLACED WITH PROPERLY COMPACTED SOILS. IN OTHER AREAS THE PIPE WILL BE PLUGGED WITH CONCRETE OR REMOVED AS APPROVED BY THE CITY ENGINEER.
6. WHEELCHAIR RAMPS SHALL BE INSTALLED PER REQUIREMENTS OF TITLE 24, CALIFORNIA ADMINISTRATIVE CODE.
7. STREET TREES SHALL BE INSTALLED PER SECTION IV D.3 OF THE CITY OF CARLSBAD LANDSCAPE MANUAL.
8. FIRE HYDRANT MARKERS SHALL BE PLACED IN THE STREET WITHIN THE LIMITS OF WORK OF THIS PLAN PER SDRS DWG M19.
9. ALL SURVEY MONUMENTS AND POINTS THAT ARE DISTURBED BY THIS WORK SHALL BE REESTABLISHED, PERPETUATED, AND DOCUMENTED PER THE PROFESSIONAL LAND SURVEYORS ACT.
10. TWO (2) SETS OF SURVEY (CUT) SHEETS SHALL BE PROVIDED TO THE CITY ENGINEERING INSPECTOR.

SEWER NOTES

1. SEWER MAIN AND APPURTENANCES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE "CARLSBAD MUNICIPAL WATER DISTRICT'S SEWER SYSTEM – DESIGN CRITERIA, STANDARD DRAWING AND SPECIFICATIONS", AND THE STANDARD SPECIFICATIONS, MARCH 1993, AND THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, LATEST EDITION (GREEN BOOK).
2. THE CONTRACTOR SHALL OBTAIN AN EXCAVATION PERMIT FROM THE DIVISION OF INDUSTRIAL SAFETY BEFORE ANY EXCAVATION AND SHALL ADHERE TO ALL PROVISIONS OF THE STATE CONSTRUCTION SAFETY ORDERS.
3. BEFORE ANY CONNECTION TO THE DISTRICT'S EXISTING SYSTEM, A PERMIT SHALL BE OBTAINED FROM THE DISTRICT. IT MUST BE SIGNED AND APPROVED BY THE DISTRICT'S ENGINEER AND SUPERINTENDENT.
4. BEFORE CONSTRUCTION BEGINS IN ANY PUBLIC RIGHT OF WAY, A CITY RIGHT OF WAY PERMIT SHALL BE REQUIRED.
5. THE CONTRACTOR SHALL NOTIFY THE CITY OF CARLSBAD ENGINEERING INSPECTION 48 HOURS PRIOR TO THE BEGINNING OF CONSTRUCTION (TELEPHONE NO. (760) 438-3891).

GENERAL NOTES

1. THIS PLAN SUPERSEDES ALL OTHER PLANS PREVIOUSLY APPROVED BY THE CITY OF CARLSBAD REGARDING IMPROVEMENTS SHOWN ON THIS SET OF PLANS.
2. APPROVAL OF THIS PLAN DOES NOT LESSEN OR WAIVE ANY PORTION OF THE CARLSBAD MUNICIPAL CODE, RESOLUTION OF CONDITIONAL APPROVAL, CITY STANDARDS OR OTHER ADDITIONAL DOCUMENTS LISTED HEREON AS THEY MAY PERTAIN TO THIS PROJECT. THE ENGINEER IN RESPONSIBLE CHARGE SHALL REVISE THESE PLANS WHEN NON-CONFORMANCE IS DISCOVERED.
3. CITY APPROVAL OF PLANS DOES NOT RELIEVE THE DEVELOPER OR ENGINEER-OF-WORK FROM RESPONSIBILITY FOR THE CORRECTION OF ERRORS AND OMISSIONS DISCOVERED DURING CONSTRUCTION. ALL PLAN REVISIONS SHALL BE PROMPTLY SUBMITTED TO THE CITY ENGINEER FOR APPROVAL.
4. A RIGHT-OF-WAY PERMIT FROM THE CITY ENGINEER WILL BE REQUIRED FOR ANY WORK IN THE PUBLIC RIGHT OF WAY. PRIOR TO PERMIT ISSUANCE, A CERTIFICATE OF INSURANCE MUST BE FILED NAMING THE CITY OF CARLSBAD AS AN ADDITIONAL INSURED ON THE PERMITTEE'S POLICY IN THE MINIMUM AMOUNT OF \$1,000,000.00 FOR EACH OCCURRENCE OF LIABILITY. THE INSURANCE COMPANY WRITING THE POLICY MUST HAVE A RATING OF "A" AND A SIZE CATEGORY OF CLASS V AS ESTABLISHED BY "BESTS" KEY RATING GUIDE.

5. NO WORK SHALL BE COMMENCED UNTIL ALL PERMITS HAVE BEEN OBTAINED FROM THE CITY AND OTHER APPROPRIATE AGENCIES.
6. REVISION OF THESE PLANS MAY BE REQUIRED IF THE PROPOSED IMPROVEMENTS ARE NOT CONSTRUCTED PRIOR TO THE DEADLINE DATE OF THE IMPROVEMENT AGREEMENT.
7. NO REVISIONS WILL BE MADE TO THESE PLANS WITHOUT THE WRITTEN APPROVAL OF THE CITY ENGINEER, NOTED WITHIN THE REVISION BLOCK, ON THE APPROPRIATE SHEET OF THE PLANS AND TITLE SHEET.
8. ORIGINAL DRAWINGS SHALL BECOME THE PROPERTY OF THE CITY UPON BEING SIGNED BY THE CITY ENGINEER.
9. THE ORIGINAL DRAWING SHALL BE REVISED TO REFLECT AS-BUILT CONDITIONS BY THE ENGINEER-OF-WORK PRIOR TO FINAL ACCEPTANCE OF THE WORK BY THE CITY.
10. ACCESS FOR FIRE AND OTHER EMERGENCY VEHICLES SHALL BE MAINTAINED TO THE PROJECT SITE AT ALL TIMES DURING CONSTRUCTION.
11. WHERE TRENCHES ARE WITHIN CITY EASEMENTS, A SOILS REPORT COMPRISED OF (A) SUMMARY SHEET, (B) LABORATORY WORK SHEETS AND (C) COMPACTION CURVES, SHALL BE SUBMITTED BY A PROFESSIONAL ENGINEER OF THE STATE OF CALIFORNIA, PRINCIPALLY DOING BUSINESS IN THE FIELD OF APPLIED SOILS MECHANICS. THE SOILS REPORT WILL BE SUBMITTED TO THE CITY ENGINEERING INSPECTOR WITHIN TWO WORKING DAYS OF COMPLETION OF FIELD TESTS. THE WRITTEN FIELD COMPACTION REPORT(S) SHALL BE IMMEDIATELY SUBMITTED TO THE CITY ENGINEERING INSPECTOR UPON COMPLETION OF THE FIELD TESTS.
12. A PRECONSTRUCTION MEETING SHALL BE HELD AT THE SITE PRIOR TO THE BEGINNING OF WORK AND SHALL BE ATTENDED BY ALL REPRESENTATIVES RESPONSIBLE FOR CONSTRUCTION, INSPECTION, SUPERVISION, TESTING AND ALL OTHER ASPECTS OF THE WORK. THE CONTRACTOR SHALL SCHEDULE THE MEETING BY CALLING THE INSPECTION LINE AT (760) 438-3891 AT LEAST FIVE (5) WORKING DAYS PRIOR TO STARTING CONSTRUCTION. APPROVED DRAWINGS MUST BE AVAILABLE PRIOR TO SCHEDULING.
13. ALL INSPECTION REQUESTS OTHER THAN FOR THE PRECONSTRUCTION MEETING WILL BE MADE BY CALLING THE ENGINEERING 24-HOUR INSPECTION REQUEST LINE AT (760) 438-3891. INSPECTION REQUESTS MUST BE RECEIVED PRIOR TO 2:00 P.M. ON THE DAY BEFORE THE INSPECTION IS NEEDED. INSPECTIONS WILL BE MADE THE NEXT WORK DAY UNLESS YOU REQUEST OTHERWISE. REQUESTS MADE AFTER 2:00 P.M. WILL BE SCHEDULED FOR TWO FULL WORK DAYS LATER.

14. THE OWNER AND/OR APPLICANT THROUGH THE DEVELOPER AND/OR CONTRACTOR SHALL DESIGN, CONSTRUCT AND MAINTAIN ALL SAFETY DEVICES, INCLUDING SHORING, AND SHALL BE SOLELY RESPONSIBLE FOR CONFORMING TO ALL LOCAL, STATE AND FEDERAL SAFETY AND HEALTH STANDARDS, LAWS AND REGULATIONS.
15. THE CONTRACTOR SHALL CONFORM TO LABOR CODE SECTION 6705 BY SUBMITTING A DETAIL PLAN TO THE CITY ENGINEER AND/OR CONCERNED AGENCY SHOWING THE DESIGN OF SHORING, BRACING SLOPE OR OTHER PROVISIONS TO BE MADE OF WORKER PROTECTION FROM THE HAZARD OF CAVING GROUND DURING THE EXCAVATION OF SUCH TRENCH OR TRENCHES OR DURING THE PIPE INSTALLATION THEREIN. THIS PLAN MUST BE PREPARED FOR ALL TRENCHES FIVE FEET (5') OR MORE IN DEPTH AND APPROVED BY THE CITY ENGINEER AND/OR CONCERNED AGENCY PRIOR TO EXCAVATION. IF THE PLAN VARIES FROM THE SHORING SYSTEM STANDARDS ESTABLISHED BY THE CONSTRUCTION SAFETY ORDERS, TITLE 8 CALIFORNIA ADMINISTRATIVE CODE, THE PLAN SHALL BE PREPARED BY A REGISTERED ENGINEER AT THE CONTRACTOR'S EXPENSE. A COPY OF THE OSHA EXCAVATION PERMIT MUST BE SUBMITTED TO THE INSPECTOR PRIOR TO EXCAVATION.
16. IF ANY ARCHAEOLOGICAL RESOURCES ARE DISCOVERED WITHIN ANY WORK ZONE DURING CONSTRUCTION, OPERATIONS WILL CEASE IMMEDIATELY, AND THE PERMITTEE WILL NOTIFY THE CITY ENGINEER. OPERATIONS WILL NOT RESTART UNTIL THE PERMITTEE HAS RECEIVED WRITTEN AUTHORITY FROM THE CITY ENGINEER TO DO SO.
17. ALL OPERATIONS CONDUCTED ON THE SITE OR ADJACENT THERETO, INCLUDING WARMING UP, REPAIR, ARRIVAL, DEPARTURE OR OPERATION OF TRUCKS, EARTHMOVING EQUIPMENT, CONSTRUCTION EQUIPMENT AND ANY OTHER ASSOCIATED GRADING EQUIPMENT SHALL BE LIMITED TO THE PERIOD BETWEEN 7:00 A.M. AND SUNSET EACH DAY, MONDAY THROUGH FRIDAY AND NO EARTHMOVING OR GRADING OPERATIONS SHALL BE CONDUCTED ON WEEKENDS OR HOLIDAYS (A LIST OF CITY HOLIDAYS IS AVAILABLE AT THE ENGINEERING DEPARTMENT COUNTER).
18. ALL OFF-SITE HAUL ROUTES SHALL BE SUBMITTED BY THE CONTRACTOR TO THE CITY ENGINEER FOR APPROVAL TWO FULL WORKING DAYS PRIOR TO BEGINNING OF WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DEBRIS OR DAMAGE OCCURRING ALONG THE HAUL ROUTE OR ADJACENT STREETS AS A RESULT OF THE GRADING OPERATION.
19. NO BLASTING SHALL BE COMMENCED WITHOUT A CITY ENGINEER APPROVED BLASTING PROGRAM.

20. THE EXISTENCE AND LOCATION OF UTILITY STRUCTURES AND FACILITIES SHOWN ON THE CONSTRUCTION PLANS WERE OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS. ATTENTION IS CALLED TO THE POSSIBLE EXISTENCE OF OTHER UTILITY FACILITIES OR STRUCTURES NOT SHOWN OR IN A LOCATION DIFFERENT FROM THAT SHOWN ON THE PLANS. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITIES SHOWN ON THE PLANS AND ANY OTHER EXISTING FACILITIES OR STRUCTURES NOT SHOWN.
21. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING FACILITIES (ABOVEGROUND AND UNDERGROUND) WITHIN THE PROJECT SITE SUFFICIENTLY AHEAD OF THE CONSTRUCTION TO PERMIT THE REVISIONS OF THE CONSTRUCTION PLANS IF IT IS FOUND THAT THE ACTUAL LOCATIONS ARE IN CONFLICT WITH THE PROPOSED WORK.
22. THE CONTRACTOR SHALL NOTIFY AFFECTED UTILITY COMPANIES (SEE BELOW) AT LEAST TWO FULL WORKING DAYS PRIOR TO STARTING CONSTRUCTION NEAR THEIR FACILITIES AND SHALL COORDINATE WORK WITH A COMPANY REPRESENTATIVE.

UNDERGROUND SERVICE ALERT	(800) 422-4133
SDG&E	(800) 660-7343
PACIFIC BELL	(800) 892-0123
ADELPHIA CABLE COMMUNICATIONS	(760) 438-7741
COX COMMUNICATIONS	(760) 806-9809
CITY OF CARLSBAD (STREETS & STORM DRAIN)	(760) 434-2980
*CITY OF CARLSBAD (SEWER, WATER & RECLAIMED WATER)	(760) 438-2722
*SAN DIEGUITO WATER DISTRICT	(760) 633-2650
*LEUCADIA COUNTY WATER DISTRICT	(760) 753-0155
*VALLECITOS WATER DISTRICT	(760) 744-0460
*OLIVENHAIN WATER DISTRICT	(760) 753-6466
*BUENA SANITATION DISTRICT	(760) 726-1340
*AS APPROPRIATE	

WATER NOTES

1. WATER MAIN AND APPURTENANCES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE "CARLSBAD MUNICIPAL WATER DISTRICT'S PROCEDURAL GUIDE – GENERAL DESIGN REQUIREMENTS AND STANDARDS AND SPECIFICATIONS FOR CONSTRUCTION OF PUBLIC POTABLE WATER FACILITIES," DATED OCTOBER 1993, OR THE LATEST REVISION.
2. THE CONTRACTOR SHALL OBTAIN AN EXCAVATION PERMIT FROM THE DIVISION OF INDUSTRIAL SAFETY BEFORE ANY EXCAVATION AND SHALL PROVIDE PROOF OF OSHA NOTIFICATION AND SHALL ADHERE TO ALL PROVISIONS OF THE STATE CONSTRUCTION SAFETY ORDERS.
3. BEFORE ANY CONNECTION OR SHUT DOWN OF VALVES ON EXISTING CMWD LINES, A PERMIT SHALL BE OBTAINED FROM THE CMWD OFFICE AND MUST BE SIGNED AND APPROVED BY DISTRICT ENGINEER AND DISTRICT SUPERINTENDENT.
4. A PRECONSTRUCTION CONFERENCE MEETING SHALL BE HELD A MINIMUM OF 7 DAYS BEFORE CONSTRUCTION BEGINS. THE CONTRACTOR SHALL NOTIFY THE CITY OF CARLSBAD ENGINEERING INSPECTION 48 HOURS PRIOR TO BEGINNING OF CONSTRUCTION, TELEPHONE NO. (760) 438-3891 FOR SCHEDULING.
5. NO TREES OR STRUCTURES SHALL BE ALLOWED IN THE WATER LINE EASEMENT. ALL EXISTING TREES AND STRUCTURES SHALL BE REMOVED PRIOR TO COMMENCEMENT OF WORK – ANY EXCEPTIONS SHALL REQUIRE WRITTEN PERMISSION FROM THE DISTRICT ENGINEER.
6. THE EXACT HORIZONTAL AND VERTICAL ALIGNMENT AND TYPE OF MATERIALS OF THE FIRE LINE LOCATED BETWEEN THE DETECTOR CHECK VALVE AND BUILDING SHALL BE DETERMINED BY THE CITY OF CARLSBAD FIRE MARSHAL.
7. ALL RECLAIMED WATER MAINS AND APPURTENANCES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE "CARLSBAD RECLAMATION RULES AND REGULATIONS FOR THE CONSTRUCTION OF RECLAIMED WATER MAINS – CARLSBAD MUNICIPAL WATER DISTRICT", OCTOBER 1993 OR AS AMENDED.
8. ALL BURIED COPPER PIPING AND APPURTENANCES SHALL BE PROTECTED BY MEANS OF CATHODIC PROTECTION. IF DEVELOPER/OWNER CONDUCTS A SOILS TEST REPORT AND DEMONSTRATES THAT PROTECTION CAN BE PERFORMED IN ANOTHER MANNER, THE DISTRICT ENGINEER WILL CONSIDER AN ALTERNATIVE FORM OF PROTECTION.

INSPECTION PROCEDURES

1. CITY CONSTRUCTION INSPECTION SHALL INCLUDE:

- A. LOCATION OF PIPE LINES.
- B. TRENCH DEPTH.
- C. REQUIRED SEPARATION (HORIZONTALLY AND VERTICALLY).
- D. PIPE IDENTIFICATION.
- E. POINTS-OF-CONNECTION (POC'S)
- F. LOCATION AND IDENTIFICATION OF SPRINKLER HEADS.
- G. WARNING SIGNS AT THE SITE AND ON THE TRUCKS HAULING RECLAIMED WATER (IF RECLAIMED WATER IS USED FOR CONSTRUCTION).

AN APPROVAL LETTER REGARDING THE INSPECTION OF THE PROJECT SHALL BE OBTAINED FROM THE CITY AND THE DISTRICT, AND BE FORWARDED TO THE COUNTY HEALTH DEPARTMENT PRIOR TO FINAL INSPECTION APPROVAL.

2. DISTRICT FINAL INSPECTION SHALL INCLUDE:

- A. COVERAGE TEST, AFTER COMPLETION OF THE SPRINKLER SYSTEM, TO DETERMINE THE ADEQUACY OF COVERAGE ON THE APPROVED USE AREA AND PROTECTION OF AREAS NOT APPROVED FOR RECEIVING RECLAIMED WATER.
- B. WARNING SIGNS AND LABELS.
- C. QUICK COUPLING VALVES.
- D. ALL ASPECTS OF THE IRRIGATION CONDITIONS INCLUDING WINDBLOWN SPRAY, RUNOFF, AND PONDING.
- E. REQUIRED PROTECTION OF ALL RESIDENTIAL AREAS.
- F. REQUIRED PROTECTION OF WELL, STREAMS, RESERVOIRS, ETC.
- G. CROSS-CONNECTION.

3. ANNUAL INSPECTION SHALL INCLUDE:

A COMPLETE INSPECTION WHICH SHOULD COVER PART A, PART B, AND PART G OF THE DISTRICT FINAL INSPECTION.

REVISIONS MUST BE APPROVED BY PUBLIC HEALTH ENGINEER, CITY ENGINEER & DISTRICT ENGINEER PRIOR TO IMPLEMENTATION IN FIELD.